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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,023	08/22/2001	Mooi Choo Chuah	29250-002181/US	9197

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HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 8910
RESTON, VA 20195

EXAMINER

PHUNKULH, BOB A

ART UNIT	PAPER NUMBER
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2616

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/935,023

Applicant(s)

CHUAH, MOOI CHOO

Examiner

Bob A. Phunkulh

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 5-8, 10, 11, 13 and 15-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5-8, 10-11, 13, 15-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is in response to applicant's 1/18/2007 amendment(s)/response(s) in the application of **CHUAH** for "**RECONFIGURABLE WIRELESS COMMUNICATION ACCESS SYSTEM AND METHOD**" filed 08/22/2001. The amendments/response to the claims have been entered. No claims have been canceled. No claims have been added. Claims 1, 5-8, 10-11, 13, 15-23 are now pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5-8, 11, 13, 15-19, 21-23 are rejected under 35 U.S.C. 102(e) as being anticipated by *Ernam* et al. (US 6,148,201), hereinafter *Ernam*.

Regarding claim 1, *Ernam* discloses a method of providing access to a wireless communications system in which a plurality of nodes in a first set (the plurality of BSCs 306-314 and dispatching switch 102, see figure 3) establish wireless links with wireless units located in geographic proximity to the nodes, the method comprising the steps of:

receiving information characterizing usage level of nodes of a second set (each of the base station controllers additional equipment which performs at least a portion of

Art Unit: 2616

the operations of the dispatching switch, see col. 2 lines 65 to col. 3 line 2; see figure 12 for the operations of dispatching switching including querying coupled MSCs and receiving MSC capacity responses);

using the information by a node of the first set to determine a first node of the second set (selecting the MSC, see col. 14 lines 1-16) with which to connect; and

connecting the node of the first set with the first node of the second set (the first set includes the plurality of BSCs, and the second set includes the plurality of MSCs, and selecting the MSC based on the load, see figure 12 steps 1212 and 1214).

Regarding claim 5, *Ernam* discloses the information characterizing usage levels of the nodes of the second set and information characterizing the node of the first set to determine a node of the second set with which to connect (see steps 1210-1212, see figure 12).

Regarding claim 6, *Ernam* discloses the information characterizing usage level of the node of the second set and information characterizing a wireless unit for which a connection is being established (see steps 1210-1212, see figure 12).

Regarding claim 7, *Ernam* discloses connecting the node of the first set with a second node of the second set (connecting the BSC to any of the MSCs, see figures 1 or 3).

Art Unit: 2616

Regarding claim 8, *Emam* discloses connecting the node of the first set with the first node of the second set for establishing a connection with a first wireless unit; and connecting the node of the first set with a second node of the second set for establishing a connection with a second wireless unit (each BSC connects to at least two MSCs, see figure 1 or 3; and at least two mobile station served by the same BSC may be connected to different MSCs, see col. 14 lines 1-16)..

Regarding claim 11, *Emam* discloses a radio access system in a wireless communications system comprising:

- a plurality of nodes in a first set adapted to establish wireless links with wireless units located in geographic proximity to the nodes (the plurality of BSCs, see figure 3);

- a connection network coupled to the plurality of nodes of the first set (a packet switched network 316 coupled to the plurality of BSCs, see figure 3, see col. 2 line 64 to col. 3 line 14; and col. 6 line 66 to col. 7 line 14);

- a plurality of nodes of a second set coupled to the connection network adapted to provide connections between a node of the plurality of nodes of the first set and the plurality of nodes of the second set (the plurality of MSc, see figure 3); and

- processing circuitry adapted to receive information characterizing usage levels of the nodes of the second set and to use the information to determine a node of the second set to connect with the node of the first set (the functions, described in figure 12, of dispatching switch may be part of the BSC, see col. 2 line 64 to col. 3 line 14).

Regarding claim 12, *Emam* discloses the processing circuitry adapted to use information including usage level of the nodes of the second set and to use information including nodes of the second set to determine the node of the second set with which to connect (see steps 1208-1212, see figure 12).

Regarding claim 15, *Emam* discloses the processing circuitry is adapted to use the information characterizing usage levels of the nodes of the second set and information characterizing the node of the first set to determine the node of the second set (see steps 1210-1212, see figure 12).

Regarding claim 16, *Emam* discloses the processing circuitry is adapted to use the information characterizing usage levels of the nodes of the second set and information characterizing a wireless unit for which a connection is being established to determine the node of the second set (see steps 1210-1212, see figure 12).

Regarding claim 17, *Emam* discloses the radio access system adapted to connect a node of the first set with a first node of the second set and to connect the node of the first set with a second node of the second set (each BSC connects to at least two MSCs, see figure 1 or 3).

Regarding claim 18, *Emam* discloses the radio access system further adapted to connect a node of the first set with a first node of the second set of base station

Art Unit: 2616

controllers for establishing a connection with a first wireless unit and to connect the node of the first set with a second node of the second set for establishing a connection with a second wireless unit (each BSC connects to at least two MSCs, see figure 1 or 3; and at least two mobile station served by the same BSC may be connected to different MSCs, see col. 14 lines 1-16).

Regarding claim 19, *Emam* discloses the processing circuitry being at the node of the first set and being adapted to receive information characterizing usage levels of the nodes of the second set and to use the information by the processing circuitry to determine the node of the second set with which to connect the node of the first set (see steps 1210-1212, see figure 12).

Regarding claim 21, *Emam* discloses establishing the wireless links between the nodes of the first set with the wireless units located in geographic proximity to the nodes is through a connection network (a packet switched network 316 coupled to the plurality of BSCs, see figure 3, see col. 2 line 64 to col. 3 line 14; and col. 6 line 66 to col. 7 line 14).

Regarding claim 22, *Emam* discloses the connection network is an internet protocol (IP) based network (a packet switched network 316 coupled to the plurality of BSCs, see figure 3, see col. 2 line 64 to col. 3 line 14; and col. 6 line 66 to col. 7 line 14, may be ATM or other packet switched network i.e. IP network).

Regarding claim 23, *Emam* discloses the connection network is an internet protocol (IP) based network (a packet switched network 316 coupled to the plurality of BSCs, see figure 3, see col. 2 line 64 to col. 3 line 14; and col. 6 line 66 to col. 7 line 14, may be ATM or other packet switched network i.e. IP network).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Emam* in view of *Kuster et al.* (US 7,006,450), hereinafter *Kuster*.

Regarding claims 10 and 20, *Emam* fails to disclose the processing circuitry further adapted to receive information from nodes of the second set using a multicast address.

Kuster, on the other hand, discloses RBS receives load information from MSCs using IP multicasting (see col. 7 lines 12-13).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention was made includes the teaching of *Kuster* in the system taught by *Emam* for multicasting provides the one time transmission of the same data to multiple destinations –thus it save the system resources.

Response to Arguments

Applicant's arguments filed 1/18/07 have been fully considered but they are not persuasive.

In response to the applicant argument, figures 11 and 12 show the operations performed by the dispatching switch 102, where the dispatching switch queries coupled MSCs and receives available capacity responses from each of the coupled MSCs (see step 1104 of figure 11; steps 1206-1208); and determines serving MSC assignment for the requesting mobile station (see step 1106 of figure 11; step 1208-1212 of figure 12).

Ernam further discloses the following in col. 2 lines 64 to col. 3 line 2:

In another particular construction, each of the base station controllers couples to each of the mobile switching centers via a network. In such case, each of the base station controllers and each of the mobile switching centers includes additional equipment which performs at least a portion of the operations of the dispatching switch (emphasis added).

Therefore, each of the base station controllers must perform receiving information characterizing (receive MSC capacity responses) from the second set of nodes (MSCs) using the responses to select the serving MSC.

It should be noted that the first set of nodes includes the dispatching switch 102 and performs operations shown in figures 11 and 12.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2616

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any response to this action should be mailed to:

The following address mail to be delivered by the United States Postal Service (USPS) only:

Mail Stop _____
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

or faxed to:

(571) 273-8300, (for formal communications intended for entry)

Or:

The following address mail to be delivered by other delivery services (Federal Express (Fed Ex), UPS, DHL, Laser, Action, Purolater, Hand Delivery, etc.) as follow:

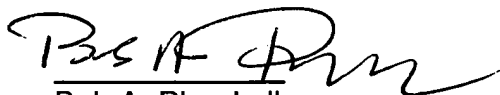
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Art Unit: 2616

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(571) 272-3083**. The examiner can normally be reached on Monday-Tuesday from 8:00 A.M. to 5:00 P.M. (first week of the bi-week) and Monday-Friday (for second week of the bi-week).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor **Wellington Chin**, can be reach on **(571) 272-3134**. The fax phone number for this group is **(571) 273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Bob A. Phunkulh
Primary Examiner
TC 2600

*Technology Division 2616
April 03, 2007*

**BOB PHUNKULH
PRIMARY EXAMINER**